

WHAT IS CLAIMED IS:

1. A hollow body, comprising:
a tube having a inner surface; and
a coating deposited on the inner surface of the tube.
2. The hollow body of claim 1, wherein one or more layers of the coating is deposited on the inner surface of the tube or hose.
3. The hollow body of claim 1, wherein the coating comprises of one or more of Si_3N_4 , SiO_2 , W, WC, WSi, Si-n, WO_3 , Al, Ti and other metals or metal oxides
4. The hollow body of claim 1, wherein the tube or hose is made of plastic comprising of PTFE, PFA, LD-PE, PA, HD-PE, PU, PVDF, MFA, FEP or any type of rubber.
5. A method of manufacturing a plastic tube having an inner surface, the method comprising the steps of:
drawing the tube past a ring electrode, the ring electrode being connected to an HF source and a direct current source;
simultaneously heating the tube with a heating elements while drawing the tube past the ring electrode;
creating a vacuum at one end of the tube; and
introducing a gas into an opposite end of the tube to coat the inner surface of the plastic tube.
6. The method of claim 5, wherein the gas is argon, hydrogen, nitrogen, helium, SiH_4 , SiH_2Cl_2 , CH_4 , NH_3 , PH_3 , B_2H_6 , WF_6 , TiCl_4 , AlCl_3 , aluminum hydride, or other metal-organics and mixtures thereof.

7. An arrangement for coating the inside of objects, the arrangement comprising:
 - a direct current source;
 - an HF source connected to the direct current source;
 - a ring electrode connected to the HF source;
 - an object spool located at an inlet side of the arrangement;
 - a vacuum apparatus located at an outlet side of the arrangement; and
 - and a gas inlet arranged to communicate gas to the objects for coating the inside of the objects.

8. An arrangement for coating the inside of objects having only one opening, the arrangement comprising:
 - a direct current source;
 - an HF source connected to the direct current source;
 - an object spool located at an inlet side of the arrangement;
 - a vacuum apparatus located at an outlet side of the arrangement;
 - a gas inlet; and
 - a hollow electrode connected for introduction of gas to the gas inlet.